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Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/820,608 03/19/97 SUNAGA

T CU-1516RJS

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WM01/0112

EXAMINER

VANDERPUYE, K

ART UNIT

PAPER NUMBER

2661

DATE MAILED:

01/12/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/820,608

Applicant(s)

Examiner

L. Vanderpump

Group Art Unit

2661

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 18-20 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 18, 20 is/are allowed.
- ☒ Claim(s) 19 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Tanaka(5,636,243).

Claim 19 is rejected because the admitted prior art teaches a transmitter used in a CDMA mobile communication system comprising:

pilot channel that transmit unit which transmits a pilot signal in spread spectrum formation and traffic channel transmit units that respectively transmit data signals while the pilot signal is transmitted(Fig. 1 and Fig. 2). What the admitted prior art does not teach is a pilot signal that is intermittently transmitted, having a period shorter than an interval in which the pilot signal is intermittently transmitted. Tanaka's invention deals with direct communications between mobile stations in which he discloses a method wherein a single base station transmits an intermittent control signal, in a predetermined control channel(TDMA slot once every 100 msec, Fig. 3), to terminals located within the service area. These terminals communicate with each other by transmitting control and response signals intermittently to establish synchronization therebetween(

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summary of the invention, also see Fig. 12). In this way less power is expended during the establishment of synchronization. Although not expressly taught by Tanaka, it is inherently imperative that the period of the pilot signal be shorter than an interval in which the pilot signal is intermittently transmitted, else intermittency would not be achieved. It would have been obvious to one of ordinary skill in the art to (a) combine the concept of intermittently transmitting a control signal with the admitted prior art i.e. intermittent transmission of a pilot signal by a CDMA transmitter, (b) intermittently transmitting a pilot signal having a period shorter than an interval in which the pilot signal is transmitted (inherent feature in order to achieve intermittency). The motivation being to reduce power consumption.

***Allowable Subject Matter***

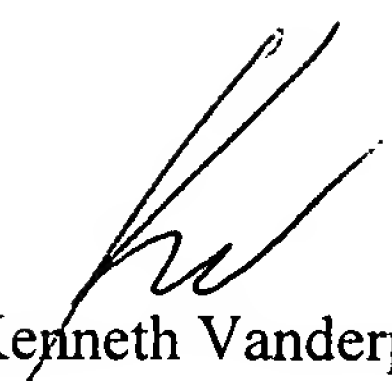
3. Claims 18, 20 are allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Vanderpuye whose telephone number is (703) 308-7828. The examiner can normally be reached on M-F from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Olms, can be reached on (703) 305-4703. The fax phone number for this Group is (703) 308-9051.

Serial Number: 08/820608

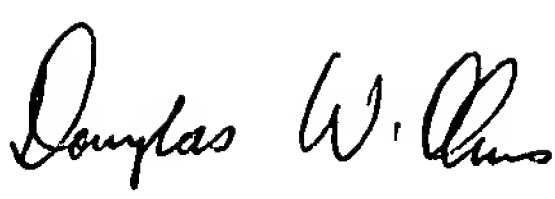
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Kenneth Vanderpuye

January 10, 2001



DOUGLAS OLMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600